

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH000-0006-04(031)	179	321

NOTE:
IRRIGATION INSTALLATION CONTRACTOR WILL BE REQUIRED TO SUBMIT COMPLETE PRODUCT DATA SHEETS FOR ALL PROPOSED IRRIGATION EQUIPMENT. ALL EQUIPMENT MUST BE DEEMED EQUAL TO SPECIFICATION AND APPROVED BY OWNER'S REPRESENTATIVE BEFORE CONSTRUCTION CAN BEGIN.

IRRIGATION LEGEND

1-1/2" WATER METER, SYSTEM REQUIRES 50 GPM @ 65 PSI (FROM EACH METER). IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE SYSTEM REQUIREMENTS AT SITE BEFORE STARTING CONSTRUCTION.

IRRIGATION METER TO BE INSTALLED AS PER LOCAL WATER AUTHORITIES' SPECIFICATIONS.

MANUAL DRAIN VALVE. SCH 80 PVC BALL VALVE. DETAIL-E.

2" DOUBLE CHECK ASSEMBLY BACKFLOW PREVENTER. DETAIL-F.

WINTERIZATION ASSEMBLY. DETAIL-N.

IRRIGATION CONTROLLER: 24 STATION, MODULAR CONTROLLER, FOUR PROGRAMS, STEEL, PEDESTAL MOUNTED. DETAIL-J. IRRIGATION CONTRACTOR SHALL ALSO INSTALL A MINI-CLICK II RAIN SENSOR AND A FREEZE-CLICK DEVICE FOR EACH CONTROLLER. CONTROLLER TO BE INSTALLED OUTSIDE OF RIGHT-OF-WAY (GDOT REQUIREMENT).

PLASTIC ELECTRIC REMOTE CONTROL VALVE (HEAVY-DUTY PLASTIC COMMERCIAL GRADE), 1-1/2" OR 2" SIZE, MOUNTED WITH SCH 80 PVC BALL VALVE, DETAIL-A.

PLASTIC ELECTRIC REMOTE CONTROL VALVE (HEAVY-DUTY PLASTIC COMMERCIAL GRADE), 1" SIZE, MOUNTED WITH SCH 80 PVC BALL VALVE, DETAIL-A.

6" POP-UP LAWN SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-0.5 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

6" POP-UP LAWN SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

RAIN BIRD 1806-SAM, 6" LAWN POP-UP SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

RAIN BIRD 1806-SAM, 6" LAWN SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

RAIN BIRD 1806-SAM, 6" LAWN END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, THREE QUARTER-3.0 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-D.

LAWN ROTOR, 40' RADIUS, FULL-6.8 GPM, HALF-3.4 GPM, QUARTER-1.7 GPM, 40 PSI (WITH CHECK VALVE, PRESSURE REGULATION, AND STAINLESS STEEL RISER). DETAIL-B.

LAWN ROTOR, 30' RADIUS, FULL-3.4 GPM, HALF-1.7 GPM, QUARTER-.85 GPM, 40 PSI (WITH CHECK VALVE, PRESSURE REGULATION, AND STAINLESS STEEL RISER). DETAIL-B.

ROTATOR SERIES NOZZLE, MOUNTED ON 6" LAWN SPRAY SPRINKLER IN LAWN, 30' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 40 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

ROTATOR SERIES NOZZLE, MOUNTED ON 6" LAWN SPRINKLER IN LAWN, 20' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-.5 GPM, 40 PSI (WITH CHECK VALVE AND PRESSURE REGULATION). DETAIL-C.

QUICK COUPLING VALVE, 1" SIZE. CONTRACTOR TO SUPPLY TWO QCV KEYS AND MATCHING HOSE SWIVELS. DETAIL-L.

SCH 80 PVC BALL VALVE, SIZED SAME AS MAINLINE, MOUNTED IN VALVE BOX, DETAIL-M.

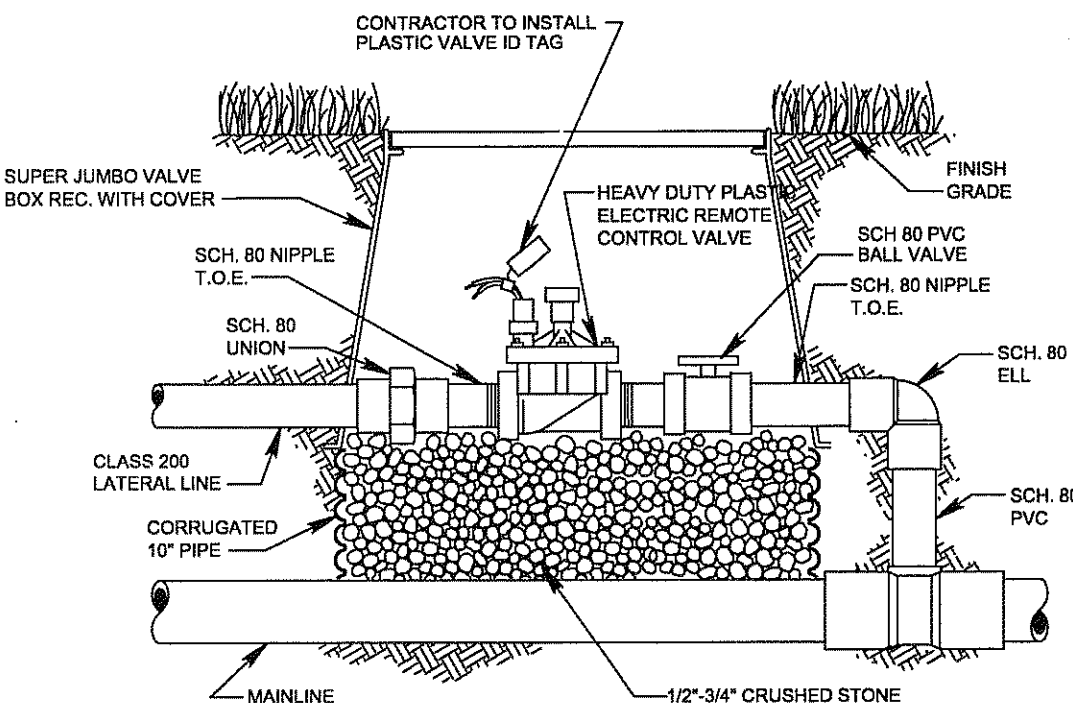
MAINLINE PIPE: 2" SIZE IF NOT NOTED. CLASS 200 PVC. WHERE NECESSARY, THRUST BLOCK AS PER MANUFACTURER'S RECOMMENDATIONS FOR PIPE TYPE, PIPE SIZE, AND LOCAL ENVIRONMENTAL CONDITIONS.

IRRIGATION SLEEVE: SCH 80 PVC, REFER TO SLEEVING PLANS. DETAIL-O.

LATERAL LINE PIPE: CLASS 200 PVC, SIZE NOTED.

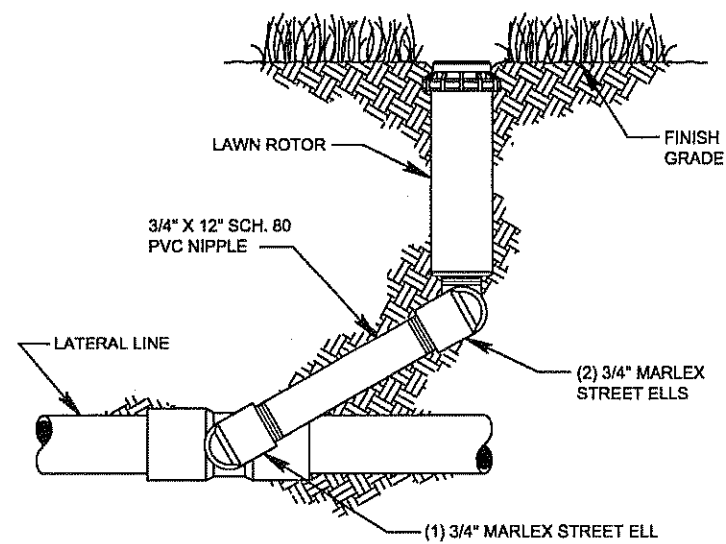
NOTES:

- ALL SPRINKLERS WILL BE MOUNTED ON (3) MARLEX STREET ELLS WITH A SCHED. 80 NIPPLE SIZE OF SPRINKLER INLET.
- CONTRACTOR TO UTILIZE A AUTOMATIC DRAIN CHECK VALVE DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
- ALL WIRE WILL BE COLOR CODED DIRECT BURIAL UL/UF WIRE: COMMON (WHITE) #12-1, CONTROL (RED) #14-1.
- ALL PIPING AND WIRING UNDER HARDTOPS WILL BE IN CLASS 200 PVC PIPE SLEEVE.
- IRRIGATION INSTALLATION CONTRACTOR SHALL INSTALL (2) SPARE CONTROL WIRES, COLOR-CODED YELLOW, FROM CONTROLLER(S) TO EACH END OF MAINLINE RUN.
- ALL PIPING TO BE INSTALLED WITH TRACER WIRE (MAINLINE AND LATERALS).



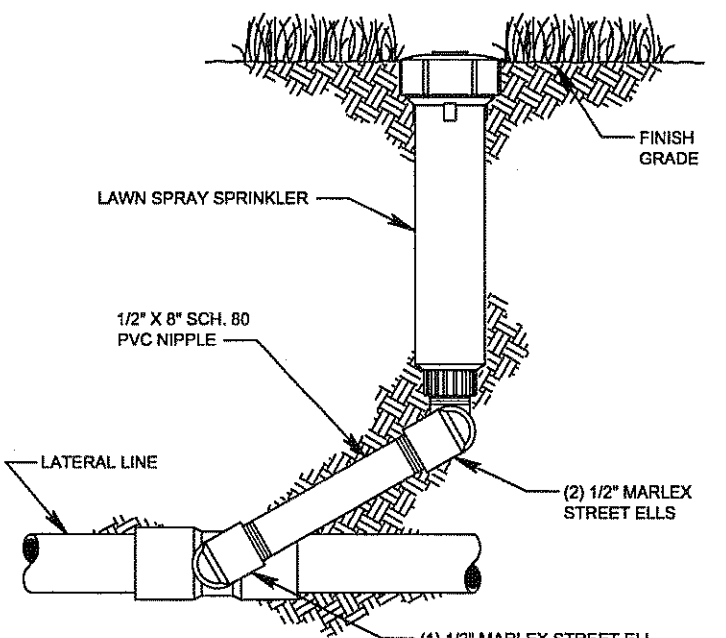
A CONTROL VALVE

NTS



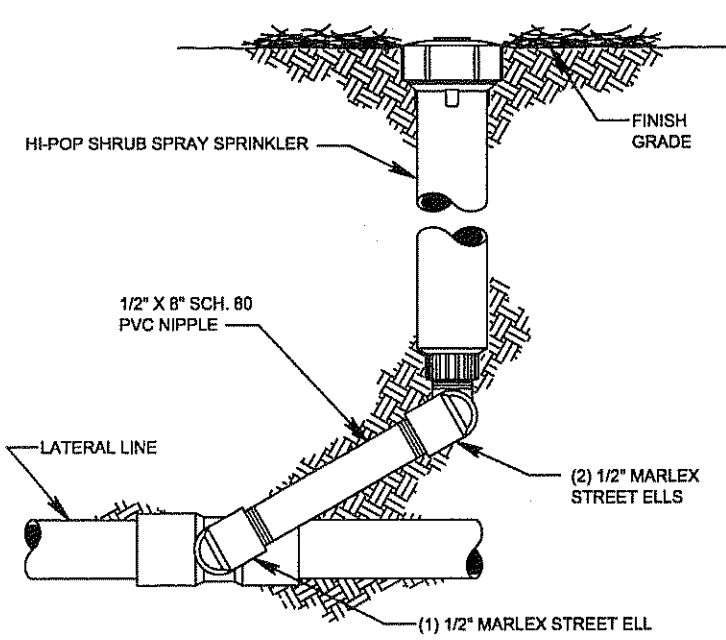
B LAWN ROTOR

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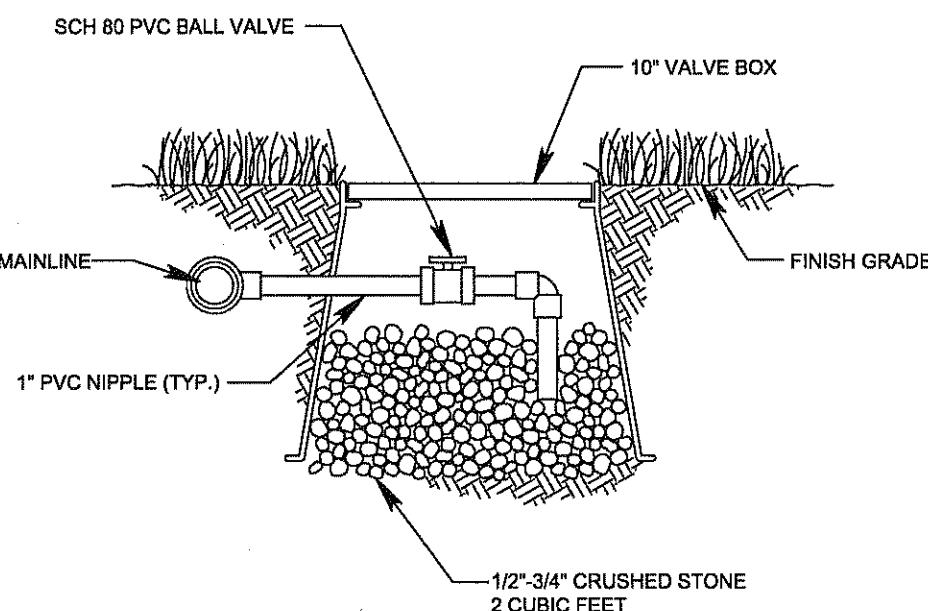
C LAWN SPRAY

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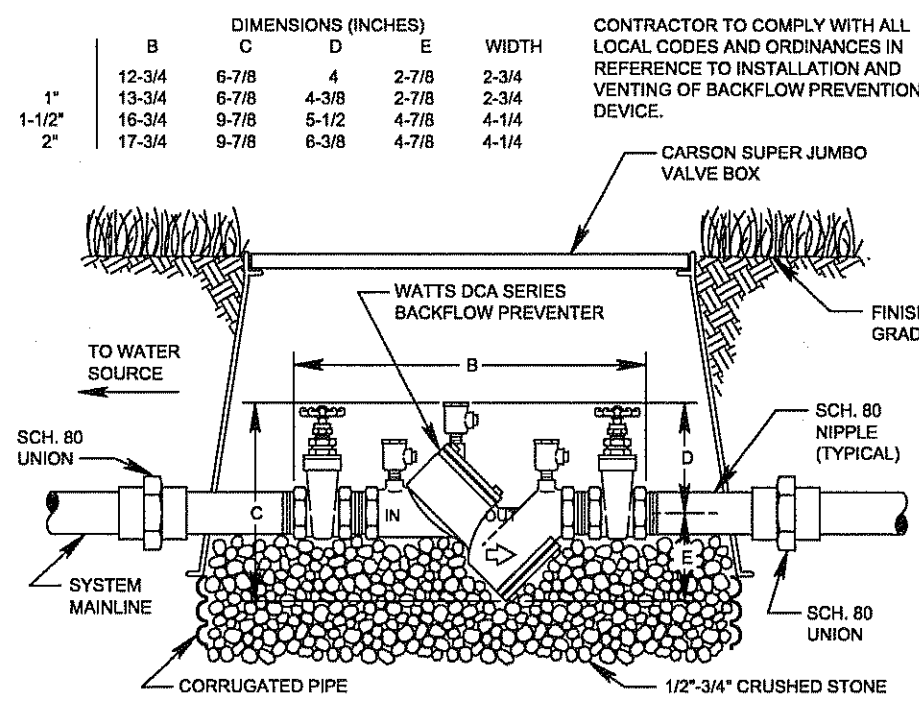
D SHRUB SPRAY

NTS



E MANUAL DRAIN VALVE

NTS



F BACKFLOW PREVENTER

NTS

* IRRIGATION CONTRACTOR SHALL SUBMIT BACKFLOW DETAIL TO LOCAL AUTHORITIES FOR APPROVAL BEFORE STARTING CONSTRUCTION.

GENERAL NOTES

- ALL MAINLINES TO HAVE A MINIMUM OF 18" OF COVER. (CLASS 200 PVC PIPE).
- ALL LATERAL AND SUB-MAIN PIPE TO HAVE A MINIMUM OF 12" OF COVER. (CLASS 200 PVC PIPE).
- NO ROCKS, BOULDER, OR OTHER EXTRANEIOUS MATERIALS TO BE USED IN BACKFILLING OF TRENCH.
- ALL PIPE TO BE INSTALLED AS PER MANUFACTURERS' SPECIFICATIONS.
- ALL THREADED JOINTS TO BE COATED WITH TEFLON TAPE OR LIQUID TEFLON.
- ALL LINES TO BE THOROUGHLY FLUSHED BEFORE INSTALLATION OF SPRINKLER HEADS.
- SPRINKLER AND RELATED EQUIPMENT TO BE INSTALLED AS PER DETAILS.
- ALL ELECTRICAL JOINTS TO BE MADE USING WATERPROOF CONNECTIONS AS SHOWN ON DETAILS.
- ALL EQUIPMENT NOT SPECIFIED IN THE LEGEND SHALL BE DETERMINED AND FURNISHED BY THE CONTRACTOR.
- NO ELECTRICAL CONNECTIONS SHALL BE MADE IN THE FIELD EXCEPT AT A VALVE CONTROL BOX OR ANOTHER VALVE BOX SPECIFICALLY FOR CONNECTIONS.
- ANY DISCREPANCY BETWEEN THIS SHEET AND OTHERS IN THIS SET MUST BE REFERRED TO THE IRRIGATION CONSULTANT BY THE CONTRACTOR FOR CLARIFICATION BEFORE PRECEEDING WITH THE WORK.
- ALL 24 VOLT WIRE SHALL BE #12 UF/UL FOR COMMON WIRE, AND #14 UF/UL FOR CONTROL WIRES, DIRECT BURIAL, SOLID COPPER.
- CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED. I.E. ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.
- CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, I.E. VERIFY ROOT BALL SIZE FOR PLANTING.
- CONTRACTOR SHALL PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 3/4" PIPE 12 TIMES).
- CONTRACTOR TO UTILIZE APPROPRIATE AUTOMATIC DRAIN DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
- ALL SPRINKLERS TO BE MOUNTED ON SWING JOINTS - REFER TO DETAILS.
- CONTRACTOR SHALL UTILIZE VALVE I.D. TAGS ON ALL REMOTE CONTROL VALVES.
- 24 VOLT WIRE SHALL BE COLOR CODED; COMMON-WHITE, CONTROL-RED.
- CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDED GROUNDING EQUIPMENT FOR POWER SUPPLY AND VALVE OUTPUT WITH (2) 5/8" COPPER CLAD GROUND RODS.
- CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDATION ON FAULT GROUND AND LIGHTNING PROTECTION.
- ALL MATERIAL TO BE SUPPLIED BY CONTRACTOR TO OWNER:
 - TWO WRENCHES FOR DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER HEADS AND VALVE SUPPLIED.
 - TWO KEYS FOR EACH OF THE AUTOMATIC CONTROLLERS.
 - TWO QUICK COUPLER KEYS WITH MATCHING HOSE SWIVELS.
- SYSTEM IS DIAGRAMMATIC TO IMPROVE CLARITY. ALL MAINLINE PIPING ELECTRIC VALVES AND WIRING ARE TO BE INSTALLED IN LANDSCAPE AREAS AND WITHIN PROPERTY BOUNDARIES. CONTRACTOR SHALL REFERENCE THE LANDSCAPE PLAN PRIOR TO THE INSTALLATION OF PIPING TO AVOID CONTACT WITH PLANT MATERIALS EXISTING OR NEW.
- CONTRACTOR SHALL INSTALL SPRINKLER EQUIPMENT 12" FROM FOUNDATIONS. ALSO INSTALL SPRINKLERS 4" FROM CURB OR WALKS.
- PRIOR TO BID IRRIGATION CONTRACTOR SHALL VERIFY RIGHT-OF-WAY AND BACKFLOW REQUIREMENTS. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY CONSULTANT OF ANY CHANGES FROM PLANS AND SPECIFICATIONS.
- IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH A REPRODUCIBLE CROSS MEASURED AS-BUILT DRAWING OF THE INSTALLED IRRIGATION SYSTEM IN AUTOCAD 2004 FORMAT BEFORE FINAL ACCEPTANCE.
- A 2-YEAR WARRANTY PERIOD SHALL BE PROVIDED FOR SYSTEM AFTER SUBSTANTIAL COMPLETION IS ACCEPTED. START UP AND ADJUSTING OF SYSTEM IN SPRING TIME SHALL BE INCLUDED IN WARRANTY.
- PRIOR TO BID, CONTRACTOR SHALL VERIFY THAT ALL MATERIALS, INSTALLATION PARAMETERS AND OPERATIONS CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY IRRIGATION CONSULTANT/DESIGNER OF ANY CHANGES REQUIRED DUE TO CURRENT CODE OR ORDINANCE DISCREPANCIES. IF CONTRACTOR DOES NOT COMPLY TO THIS NOTIFICATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY INSTALLATION CHANGE AND REDESIGN COSTS FOR NON-COMPLIANCE.

TYPICAL VALVE INDICATOR

28.5
1-10
1 1/2
GALLONS PER MIN.
CONTROLLER # - STATION #
VALVE SIZE

SCALE IN FEET

0 20 40 80

LAND LOT NO.

LAND DISTRICT: 10th

GMD: 55

GEORGIA
DEPARTMENT OF TRANSPORTATION
IRRIGATION DETAILS
PROJECT: NH000-006-04(031)
COUNTY: UPSON

29-31



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